# **4884 Brick Church Pike Culvert Replacement**

## **Existing Conditions**

## **Description**:

The culvert structure consists of a 42' long 18" CMP culvert with stone masonry headwall at the outfall located approximately 35' south of the featured address, 4884 Brick Church Pike. The corrugated metal pipe exhibits various corrosive holes throughout the culvert with heavy layers of rust. Additionally, the culvert appears to be collapsing at approximately 15' in from the outlet. The inlet shows a sediment blockage of approximately 90% and the outlet headwall exhibits some heavy mortar loss with missing stones.

Spans: 1

Length: 42'

Width: 18"

**Rise:** 18"

#### **Reasons for replacement:**

- ✓ 100% Section Loss
- ✓ Crushed Pipe Inlet
- ✓ Collapsed CMP



**Crushed Pipe Inlet** 



**Section Loss & Pipe Collapse** 



**Failing Headwall** 

# **4884 Brick Church Pike Culvert Replacement**

## **Proposed Conditions**

### **Description:**

The proposed culvert construction will include an 18" reinforced concrete pipe, reinforced concrete headwalls, roadway reconstruction, and site restoration to ensure proper functionality. Additionally, due to the shear roadside embankments, guardrail shall be installed along the east side of Brick Church Pike for approximately 250'.

Spans: 1

Length: 37'

**Width: 18"** 

Rise: 18"

**Opinion of Probable Cost:** \$150,000

**Anticipated Construction Duration: 3 Weeks** 

### **Anticipated Schedule for Construction:**

July 21st through August 12th

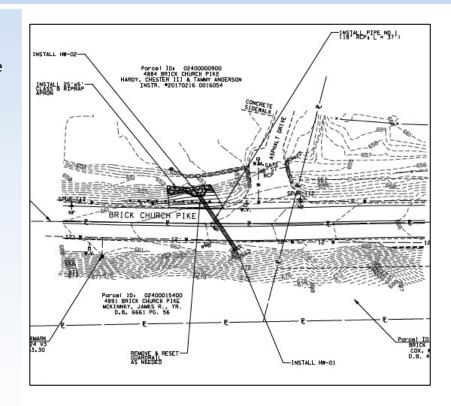
#### **Intermittent Lane Closures:**

July 21st through August 12th

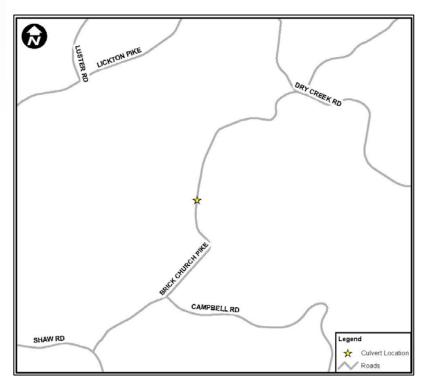
Project Status: Ready for construction

## **Construction Challenges:**

- ✓ Coordination Between Utilities and the NDOT Annual Contractor
- ✓ Depth of Excavation



**Project Plan View** 



**Vicinity Map**